



**PARIS**

**water pollution  
control plant**

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ONTARIO WATER RESOURCES COMMISSION

801 BAY STREET, TORONTO 5

OFFICE OF THE GENERAL MANAGER

Members of the Paris Local Advisory Committee,  
Town of Paris.

Gentlemen:

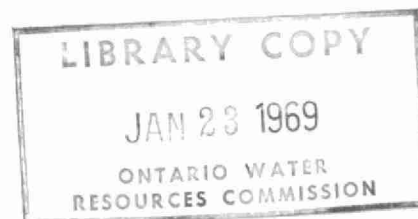
We are happy to present you with the 1967 Operating Summary for the Paris  
Water Pollution Control Plant, OWRC Project No. 2-0034-59.

Your co-operation with our staff throughout the year has been appreciated.  
Only with such co-operation can the war against water pollution be waged  
effectively.

Yours very truly,

A handwritten signature in dark ink, appearing to read "D. S. Caverly".

D. S. Caverly,  
General Manager.





ONTARIO WATER RESOURCES COMMISSION

801 BAY STREET  
TORONTO 5

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D. S. CAVERLY  
GENERAL MANAGER

W. S. MACDONNELL  
COMMISSION SECRETARY

General Manager,  
Ontario Water Resources Commission.

Dear Sir:

I am pleased to submit to you the 1967 Operating Summary for the Paris Water Pollution Control Plant, OWRC Project No. 2-0034-59.

The summary reviews progress during the year, outlines operating problems encountered and summarizes in graphs, charts and tables all significant flow and cost data.

Yours very truly,

A handwritten signature in cursive script, reading "D. A. McTavish".

D. A. McTavish, P. Eng.,  
Director,  
Division of Plant Operations.

## FOREWORD

● This operating summary has been prepared in order to acquaint readers with the management of the project during 1967. The efficiency of the plant's operation is reflected in a general review. Significant financial details are recorded, and technical performance is illustrated by graphs and charts.

The summary should answer two salient questions. Are the project's facilities adequate at this time? And can the project meet future requirements?

The Regional Operations Engineer is primarily responsible for the preparation of the report, and will be pleased to answer any questions regarding it.

Most of the material for the graphs and charts was compiled by the statistics section of the Division of Plant Operations, with the final versions of the graphs being drawn by the draughting section of the Division of Sanitary Engineering. Cost data were provided by the Division of Finance.

It will be evident from the report that all of these groups co-operated with substantial success.

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**PARIS**  
**water pollution control plant**

operated for

THE TOWN OF PARIS

by the

ONTARIO WATER RESOURCES COMMISSION

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DIVISION OF PLANT OPERATIONS

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Assistant Director:	C. W. Perry
Regional Supervisor:	A. C. Beattie
Operations Engineer:	R. S. McKittrick

801 Bay Street Toronto 5

## **'67 REVIEW**

The Paris project operated successfully during 1967, producing a satisfactory effluent with an average BOD of 12.8 ppm and an average suspended solids of 17 ppm.

Unfortunately, much of the 1967 annual report had to be omitted due to inaccurate flow records. When the project was initially constructed, a flow meter was installed which was considerably too large. Rather than alter the flow meter at some cost to the project, an alternative method of flow measurement was decided upon. This consisted of recording raw sewage pump times at the plant and using the manufacturer's specified capacity for that pump. During the past year, checks were made on this method of flow measurement and it was determined to be inaccurate. Arrangements were made immediately to scale down existing flow metering equipment to a suitable range for present raw sewage flows. At the time of writing, this work had not been done. Our lack of confidence in the existing flow records warranted their deletion from the 1967 annual report.

Included in this report is information on the strength of raw sewage received, and a breakdown of the operating costs.

The services of J. D. Lee, Consulting Engineers, Ltd., were enlisted during the past year for the preparation of a report on existing facilities at the Paris plant with a view to future expansion. A draft of this report has been received from the consultant. However, finalization of the report is being delayed until accurate flow information can be obtained.

The plant and the two pumping stations operated in conjunction with the plant were in satisfactory condition at the conclusion of 1967. Due to recurring icing problems during severe winter weather, considerable attention is being given to proposals for the elimination of this problem. It is anticipated that meetings will be held with the Local Advisory Committee during the summer of 1968 to discuss modifying the plant to eliminate the ice problem.



## PROJECT COSTS

NET CAPITAL COST (Estimated)		\$726, 125. 80
DEDUCT - Payments from Municipalities	\$ 52, 170. 00	
- Portion Financed by CMHC (Estimated)	<u>365, 238. 90</u>	<u>417, 408. 90</u>
Long Term Debt to OWRC		<u>\$308, 716. 90</u>
Debt Retirement Balance at Credit (Sinking Fund) December 31, 1967		\$ <u>36, 514. 55</u>
Debt Retirement		\$ 6, 595. 00
Reserve		4, 369. 26
Interest Charged		18, 142. 30
Net Operating		<u>11, 463. 12</u>
TOTAL		\$ <u>40, 569. 68</u>

### RESERVE ACCOUNT

Balance at January 1, 1967	\$ 17, 853. 95
Deposited by Municipality	4, 369. 26
Interest Earned	<u>1, 109. 31</u>
	\$ 23, 332. 52
Less Expenditures	<u>-</u>
Balance at December 31, 1967	\$ <u>23, 332. 52</u>

SPECIAL OPERATING AGREEMENT

BILLINGS

Reserve	<u>\$278.00</u>
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RESERVE ACCOUNT

Balance at January 1, 1967	\$140.47
Deposited by Municipality	278.00
Interest Earned	<u>14.18</u>
	\$432.65
Less Expenditures	<u>-</u>
Balance at December 31, 1967	<u>\$432.65</u>

## MONTHLY OPERATING COSTS

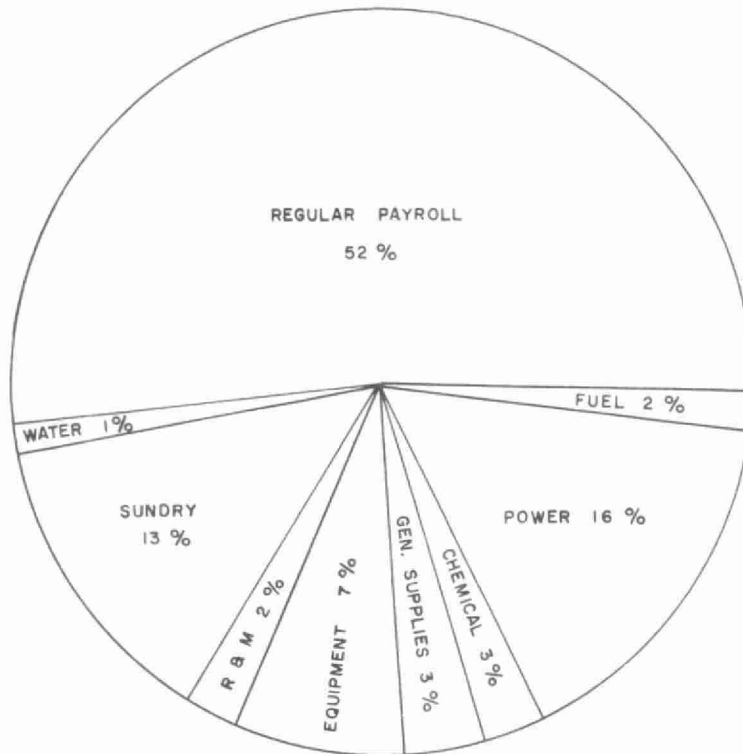
MONTH	TOTAL EXPENDITURE	PAYROLL	FUEL	POWER	CHEMICAL	GENERAL SUPPLIES	EQUIPMENT	REPAIRS & MAINTENANCE	* SUNDRY	WATER
JAN	528.59	441.12				32.00		39.26	16.21	
FEB	768.41	413.03	64.95	164.82			50.65		74.96	
MARCH	1,320.46	713.26		163.88		82.84	205.90	64.04	90.54	
APRIL	878.28	497.39	58.35	160.06		20.28	59.17	3.92	70.11	
MAY	734.18	477.32	12.80	153.41		42.52			48.13	
JUNE	739.79	435.82		157.29		41.14		16.18	89.36	
JULY	1,040.95	451.15		155.72	69.38	30.90		27.65	260.26	45.89
AUG	1,060.76	456.26		163.88	221.98	45.51	61.67	48.00	63.46	
SEPT	909.95	679.85		155.08		7.40			67.62	
OCT	723.83	456.26		149.89		57.03			60.65	
NOV	1,140.32	478.22		152.64		15.74			493.72	
DEC	1,617.60	449.48	62.62	274.66		20.88	474.49	45.83	194.93	94.71
TOTAL	11,463.12	5949.16	198.72	1860.33	291.36	396.24	851.88	244.88	1529.95	140.60

\* SUNDRY INCLUDES SLUDGE HAULING COSTS WHICH WERE \$199.00

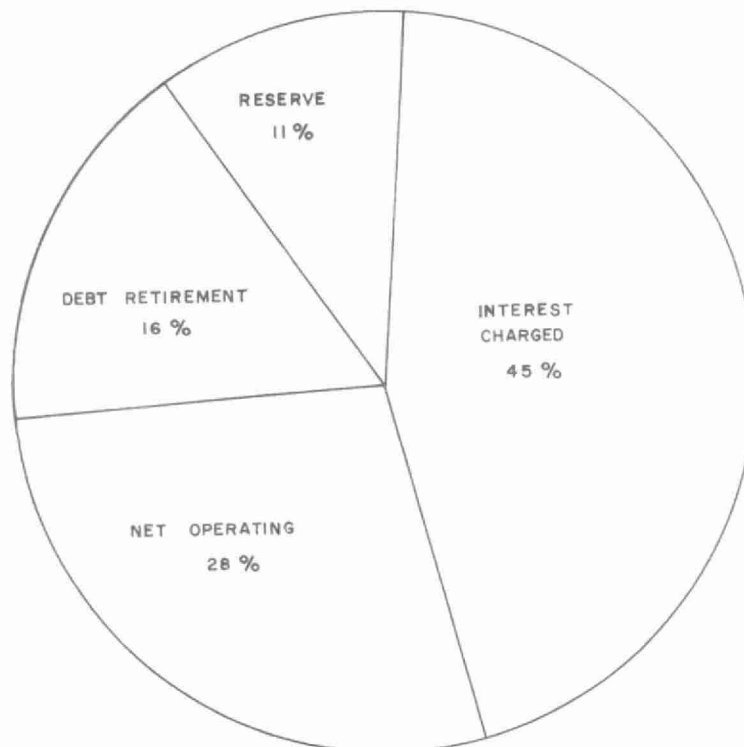
## YEARLY OPERATING COSTS

YEAR	M.G. TREATED	TOTAL COST	COST PER MILLION GALLONS	COST PER LB OF BOD REMOVED
1965	149,727	\$ 8109.72	\$ 54.16	3 CENTS
1966	169,979	\$10267.83	\$ 60.41	4 CENTS
1967	183,984	\$11463.12	\$ 62.30	3 CENTS

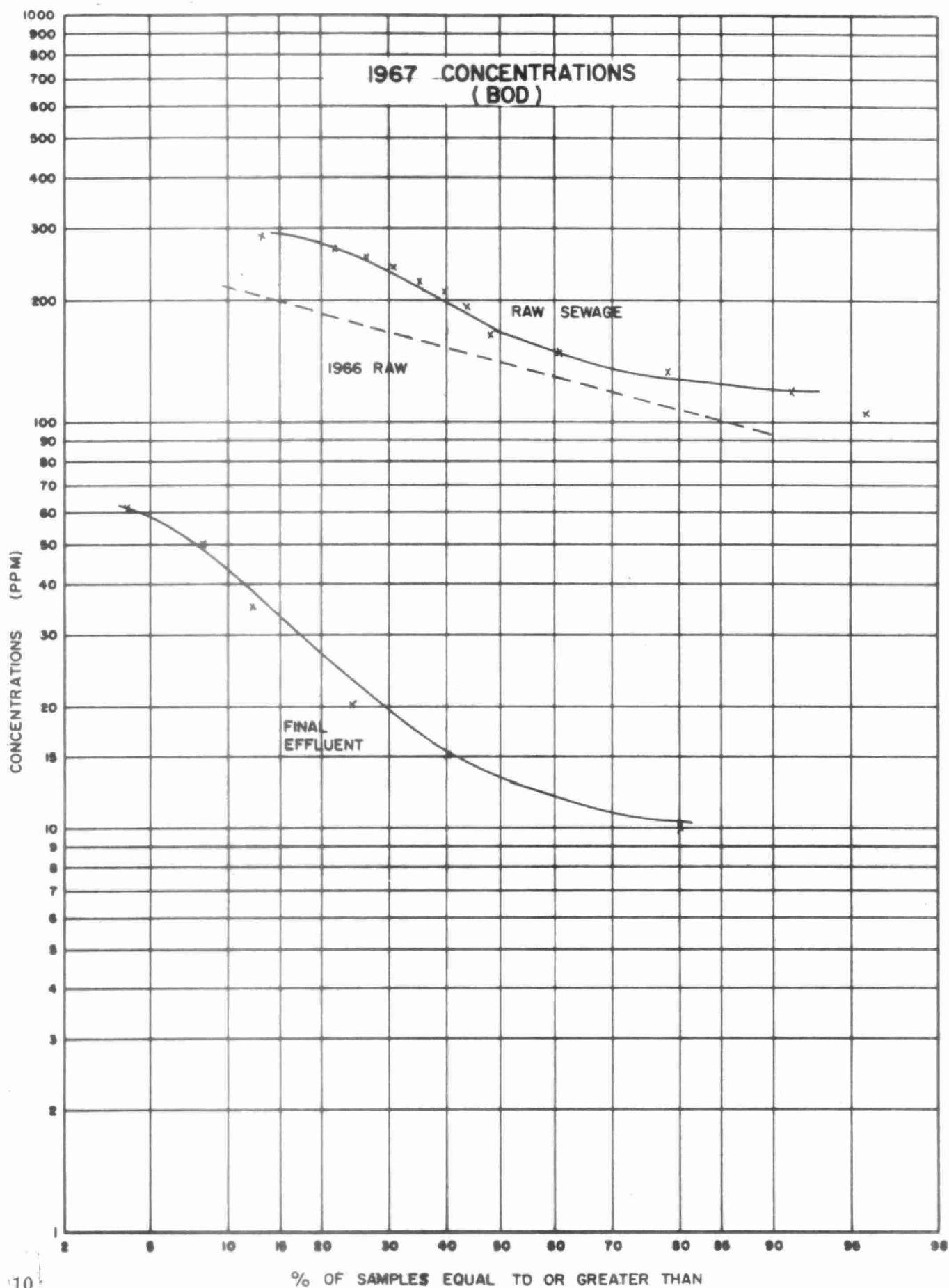
## 1967 OPERATING COSTS

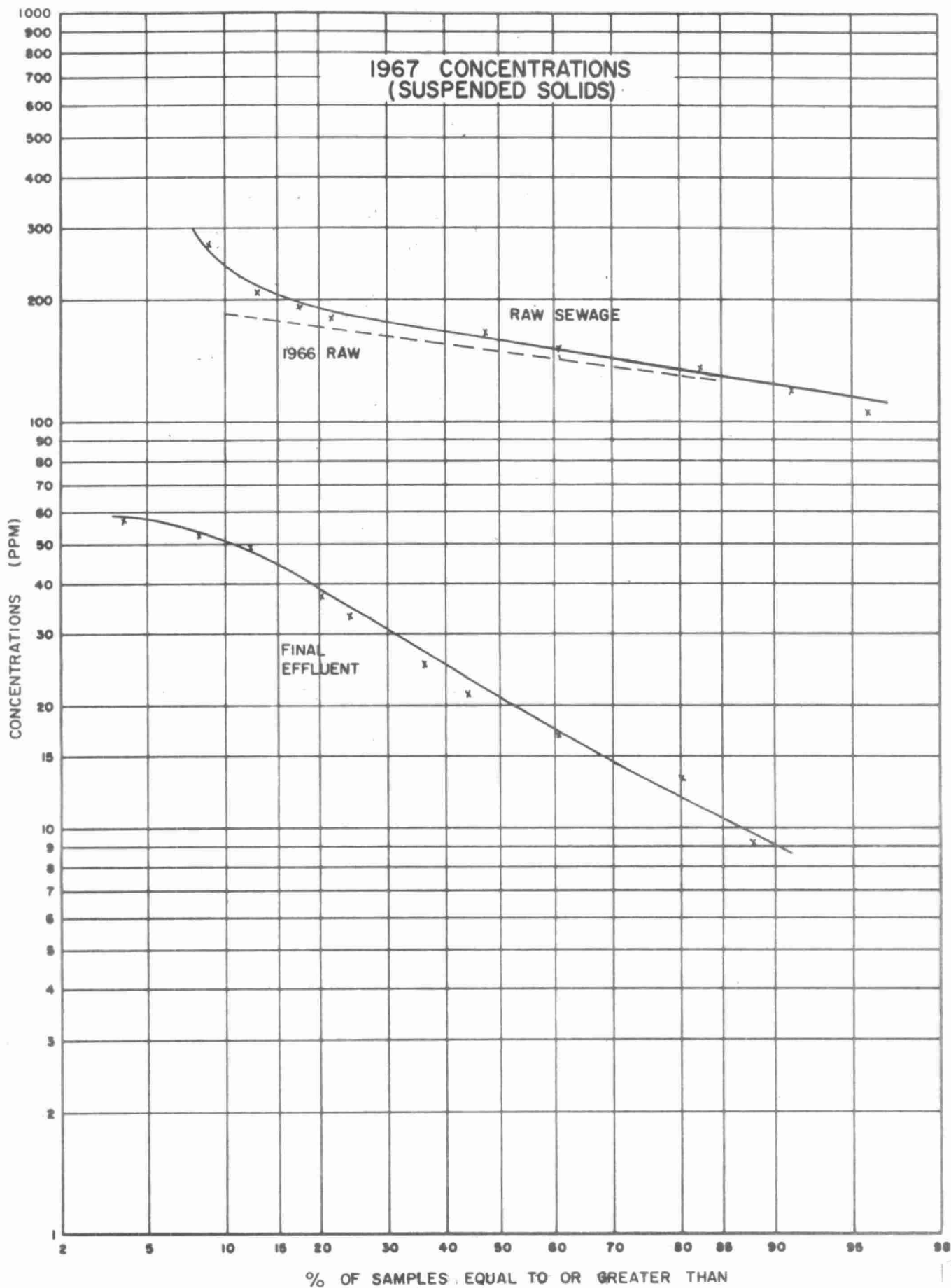


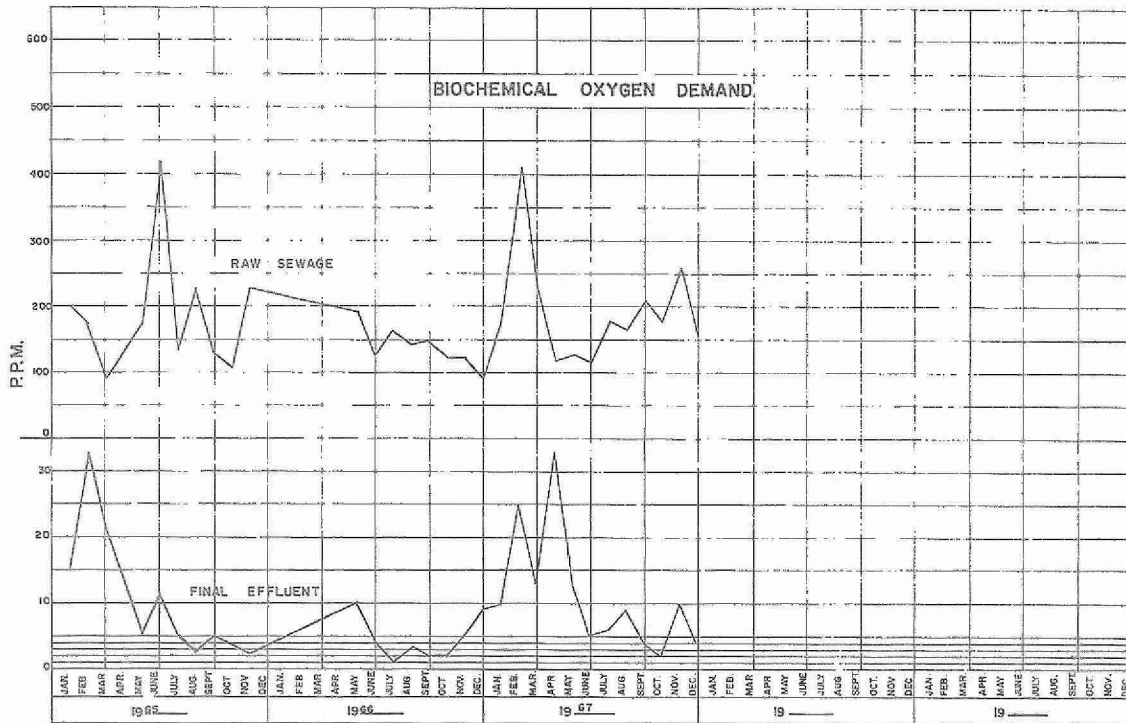
## TOTAL ANNUAL COST



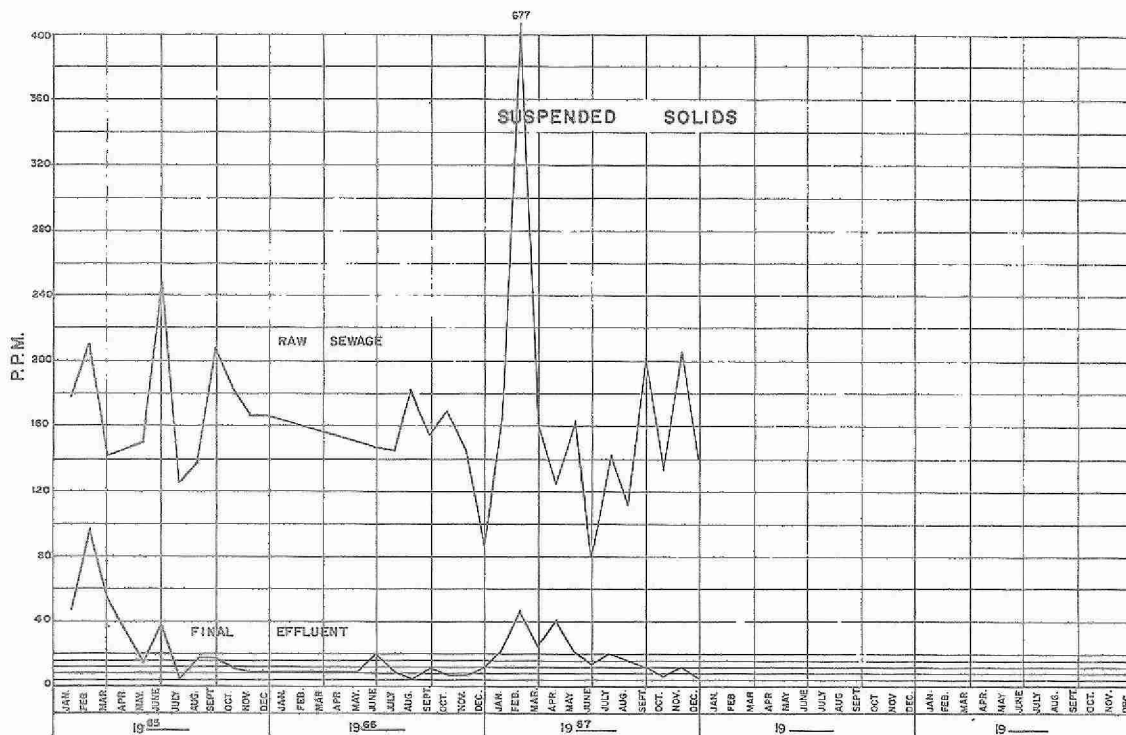
# Process Data







## MONTHLY VARIATIONS



# GRIT, B.O.D AND S.S. REMOVAL

MONTH	B. O. D.				S. S.			
	INFLUENT PPM.	EFFLUENT PPM.	% REDUCTION	TONS REMOVED	INFLUENT PPM.	EFFLUENT PPM.	% REDUCTION	TONS REMOVED
JAN.	180	9.6	94.7	11.69	167	20	88.0	10.08
FEB.	417	25.0	94.0	25.08	677	45	93.3	40.44
MAR.	234	13.1	94.4	16.10	161	23	85.7	10.06
APR.	123	33.0	73.2	8.38	124	39	68.5	7.92
MAY	131	13.0	90.1	8.31	162	20	87.6	10.01
JUNE	120	5.1	95.7	9.67	76	12	84.2	5.39
JULY	183	6.2	96.6	10.16	142	1.8	98.7	8.06
AUG.	170	9.3	94.5	9.67	110	14	87.3	5.78
SEPT.	214	4.2	98.0	14.05	201	10	95.0	12.79
OCT.	183	21.0	98.8	12.03	133	4	97.0	9.58
NOV.	260	9.5	96.3	21.85	204	9.5	95.3	16.96
DEC.	155	4.2	97.3	18.18	137	3	97.8	16.15
TOTAL	-	-	-	165.17	-	-	-	153.22
AVG.	198	12.8	93.6	13.76	191	17	89.9	12.76



## CHLORINATION

MONTH	PLANT FLOW (MG)	POUNDS CHLORINE	DOSAGE RATE (PPM)
JANUARY	13.716	218.5	1.59
FEBRUARY	12.798	258	2.01
MARCH	14.574	251	1.72
APRIL	18.630	*199.5	1.46
MAY	14.094	221	1.56
JUNE	16.840	264.5	1.57
JULY	11.496	187	1.63
AUGUST	12.042	165	1.37
SEPTEMBER	13.392	107	1.71
OCTOBER	14.850	240	1.61
NOVEMBER	17.442	295.5	1.69
DECEMBER	24.110	**274.5	1.21
TOTAL	183.984	2681.5	-
AVERAGE	15.332	223.5	1.59

\* Chlorination for 22 days

\*\* Chlorination for 29 days

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